

# Sedal

## Thermostatic Cartridges



The faucet's heart

# Featuring

## Size

Available in multiple diameters and configurations to fit a wide range of shower and bath mixer designs, from compact concealed solutions to high-flow applications.

## Wax Elements

Equipped with advanced thermostatic wax elements for fast temperature response, precise regulation, and stable performance under changing pressure and temperature conditions.



## Mechanical Standards

Engineered and validated according to major international standards, including EN1111 / EN1287 (Europe), ASSE 1016 / ASSE 1070 (North America), NF077 (France), AS/NZS (Australia & New Zealand), QBT418 (China) guaranteeing durability and consistent performance.

## Performance

Designed to deliver outstanding temperature stability, smooth operation, high flow rates, and reliable anti-scald protection for maximum user comfort.

## Materials

Manufactured with high-performance engineering polymers and premium brass options, ensuring excellent durability, thermal resistance, and long-term reliability.

## Sanitary Certifications

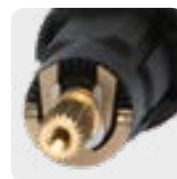
Available in compliance with key international drinking water and sanitary regulations, including 4MS, WRAS, ACS, NSF, KTW, and lead-free requirements. DWD-compliant versions for the new European sanitary regulations are also available.

## Basics

Sedal's Basic range of thermostatic cartridges offers a cost-effective solution by using alternative materials to optimize pricing while maintaining reliable thermostatic performance. Ideal for customers looking for flexible cost-saving options.

## Click Function

Integrated click-stop functionality provides precise and intuitive temperature or flow adjustment, enhancing user control, comfort, and safety during operation.



## A mixer with thermostatic geometry:

A cost-efficient alternative designed with the same external geometry as a thermostatic cartridge, but engineered without the wax element and active temperature regulation system. Internal components are optimized for standard water mixing functionality, enabling manufacturers to use the same faucet and shower body platform while offering a simplified "low-specification" solution. Ideal for entry-level or cost-sensitive applications, this variant reduces product cost while maintaining visual consistency and installation compatibility across product ranges.



# Worldwide Mechanical Standards

Thermostatic cartridges must comply with strict international standards to guarantee safety, comfort, durability, and temperature stability in showers and faucets. Worldwide regulations such as EN1111 / EN1287 (Europe), ASSE 1016 / ASSE 1070 (North America), NF077 (France), AS/NZS (Australia & New Zealand), QBT418 (China), and other regional specifications define demanding performance and safety requirements for thermostatic products.

Sedal develops thermostatic cartridges designed to fulfill worldwide mechanical standards, offering reliable and high-performance solutions for global markets. With extensive validation and testing capabilities, Sedal provides products ready to support international certification requirements and customer needs across showers, faucets, and advanced thermostatic applications.



## Core Thermostatic

The TM001 CORE & TM006 CORE inner bodies are multi-function subassemblies that make it extremely simple to expand your range of thermostatic showers. Made from high-standard thermoplastics, the CORE functions as the actual faucet, requiring only the development of a surrounding body.

It includes the waterways, holds the thermostatic cartridge and a secondary flow control valve, serves as the main structural component, and is fully tested and calibrated before delivery to the manufacturer



# Technical Specifications

## TM-001

	TM-001 Standard					
	TM-001 UBA-4MS					
	BRASS UBA-4MS	TM-001 LP 4MS	TM-001 BASIC NAT	TM-001 C STD	TM-001 C 4MS	TM-001 HP
<b>General</b>						
Burst pressure	> 25 bar/min	> 25 bar/min	> 25 bar/min	> 35 bar/min	> 25 bar/min	> 35 bar/min
Life cycle - EN-1287 - EN-1111 - ASSE 1016	100.000 cycles	<b>50.000 cycles</b>	<b>50.000 cycles</b>	<b>100.000 cycles</b> <b>100.000 cycles</b>	100.000 cycles	<b>100.000 cycles</b> <b>80.000 cycles</b>
Max. Hot water temperature	90 °C	90 °C	90 °C	90 °C	90 °C	90 °C
Max. Turn angle for stoppers (from 38°C in 0° angle position)	±170° angle	±170° angle	±170° angle	±170° angle	±170° angle	±170° angle
Noise level	Class I	Class I	Class I	Class I	Class I	Class I
Turn left - right	< 0,35	< 0,35	< 0,35	<b>0,3 - 0,5</b>	<b>0,3 - 0,5</b>	< 0,35
Sensitivity (36-40°C) (handle R 20 mm)	14 mm	<b>20 mm</b>	14 mm	<b>15 mm</b>	<b>15 mm</b>	14 mm
Cold water supply failure test	Perfect cutting	Perfect cutting	Perfect cutting	Perfect cutting	Perfect cutting	Perfect cutting
Flow rate (free)	23 l/min at 3 bar	<b>16 l/min at 0.6 bar</b> <b>34 l/min at 3 bar</b>	<b>22 l/min at 3 bar</b>	<b>26 l/min</b>	<b>26 l/min</b>	23 l/min at 3 bar

## TM-002

	TM-002 ASSE	
	TM-002 EN	
	TM 002 QB	
	TM-002 NF C1	
	TM-002 NF C3	TM-002 ASSE High Flow
<b>General</b>		
Burst pressure	> 35 bar/min	> 35 bar/min
Life cycle - EN-1111 - ASSE 1016 - QB/T 5418	100.000 cycles 100.000 cycles 30.000 cycles	100.000 cycles
Max. Hot water temperature	90 °C	90 °C
Max. Turn angle for stoppers (from 38°C in 0° angle position)	±170° angle	±170° angle
Noise level	Class I	Class I
Turn left - right	< 0,5 Nm	< 0,5 Nm
Sensitivity (36-40°C) (handle R 20 mm)	19 mm	19 mm
Cold water supply failure test	Perfect cutting	Perfect cutting
Flow rate	38,1 l/min @ 3 bar	<b>60,4 l/min @ 3 bar</b>

## TM-003

	TM-002 ASSE
	TM-002 EN
	TM 002 QB
	TM-002 NF C1
	TM-002 NF C3
<b>General</b>	
Burst pressure	> 35 bar/min
Life cycle - EN-1111 - ASSE 1016 - QB/T 5418	100.000 cycles 100.000 cycles 30.000 cycles
Max. Hot water temperature	90 °C
Max. Turn angle for stoppers (from 38°C in 0° angle position)	±170° angle
Noise level	Class I
Turn left - right	< 0,5 Nm
Sensitivity (36-40°C) (handle R 20 mm)	19 mm
Cold water supply failure test	Perfect cutting
Flow rate	33 l/min @ 3 bar

## TM-006

	TM-006 Standard		
	TM-006 Basic QB	TM-006 With Clicks	TM-006 Basic EN
<b>General</b>			
Nut torque / pitch M1,5	8 - 10 Nm	8 - 10 Nm	8 - 10 Nm
Burst pressure	> 25 bar/min	<b>&gt; 35 bar/min</b>	<b>&gt; 35 bar/min</b>
Life cycle - QB/T 5418-2019 - EN 1111 - ASSE 1016	30.000 cycles	<b>100.000 cycles</b> <b>100.000 cycles</b>	<b>50.000 cycles</b>
Max. Hot water temperature	90 °C	90 °C	90 °C
Max. Turn angle for Cold water	<170° angle	<170° angle	<170° angle
Max. Turn angle for Hot water	<80° angle	<80° angle	<80° angle
Max. Turn angle for stoppers	-	±170° angle	±170° angle
Noise level	Class I	Class I	Class I
Turn left - right	< 0,03 - 0,18 Nm	< 0,03 - 0,18 Nm	< 0,03 - 0,18 Nm
Sensitivity (36-40°C) (handle 22 mm)	18 mm	<b>27 - 31 mm</b>	18 mm
Water hammer test		<b>100 cycles 8bar / 50 bar</b>	
Cold water supply failure test	Perfect cutting	Perfect cutting	Perfect cutting
Flow rate (free)	20 l/min @ 3 bar	<b>21 l/min @ 3 bar</b>	20 l/min @ 3 bar